

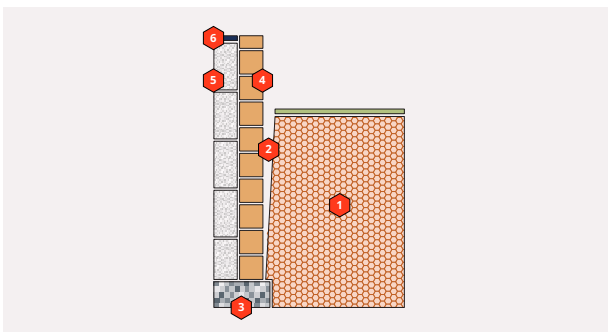


FOUNDATIONS

There are four types of foundation: Deep Strip, Raft, Trenchfill and Piled. Wherever possible, establish ground conditions by means of a survey in order to pre-determine the foundation method best for your site.

DEEP STRIP FOUNDATIONS

Deep Strip foundations are the least expensive and are used when ground conditions are good. A concrete strip, sometimes reinforced with steel mesh, supports the walls. The trench depth is variable but in most cases should be at least 1m with a width of 600mm. The concrete should have a minimum depth of 225mm.

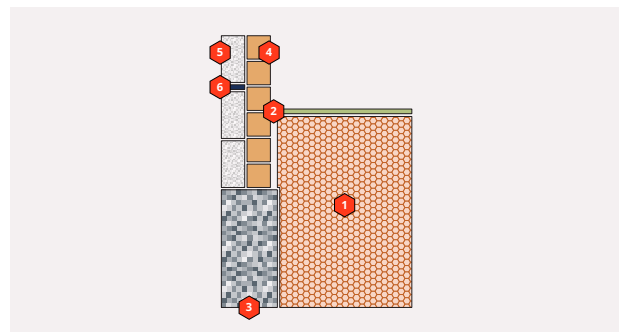


Deep Strip Foundation Construction

- 1 Land
- 2 Foundation Trench
- 3 Deep strip Foundation
- 4 Outside Wall
- 5 Inner Wall
- 6 Damp-Proof Course

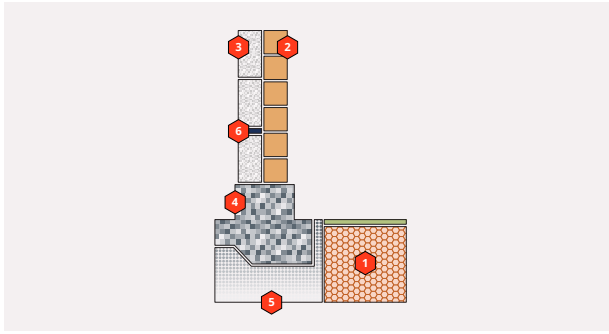
RAFT FOUNDATIONS

Raft foundations are used where the ground is inherently stable but where conditions deep below the surface, such as mining, might lead to ground movement. The reinforced raft is cast on top of consolidated hardcore and is shaped at the edge to provide a step upon which both leaves of the wall are constructed.



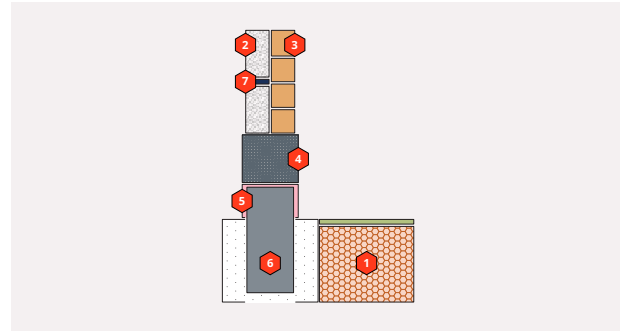
Trenchfill Foundation Construction

- 1 Land
- 2 Foundation Trench
- 3 'Trenchfill' Foundation
- 4 Outside Wall
- 5 Inner Wall
- 6 Damp-Proof Course



Raft Foundation Construction

- 1 Land
- 2 Outside Wall
- 3 Inner Wall
- 4 Hardcore Infill
- 5 Raft Foundation
- 6 Damp-Proof Course



Piled Foundation Construction

- 1 Land
- 2 Inner Wall
- 3 Outside Wall
- 4 Reinforced Concrete Groundbeam
- 5 Compressible Material
- 6 Concrete Pile
- 7 Damp-Proof Course

PILED FOUNDATIONS

Piled foundations are used where good bearing ground can only be found at deeper levels or where physical restraints make other forms of foundation impossible. A Piled foundation is usually carried out by specialist contractors. The piles can be dug, bored or driven into the ground. They support a concrete ring beam or ground beam that spans from pile to pile, upon which the house is built. This ring beam can be prefabricated, but if it is cast on site, it may be necessary to have reinforcement cages ready-made up to an engineer's specification. In certain situations, it may also be necessary to have compressible materials on hand to line the underside or sides of the beam.

OVERCROWDING ON SITE

Bear in mind that during the build a number of items may be needed at short notice such as scaffolding, diggers, dumpers or cranes, so ensure there is adequate space for them. It is also a good idea, if you have room, to position a skip on site for the gathering and regular removal of rubbish as the build progresses.

TIPS

1

Concrete burns the skin so always wear protective gloves and footwear.

2

Ensure the base of any foundation trench is clean, level, dry and free of any loose material. Trench sides should be cut square with the base. The ideal situation is to excavate the trenches and pour the concrete the same day. Special mixes that flow around the whole channel are available, which do away with barrowing.

3

Foundations poured in winter conditions must be done following strict guidelines and should be covered over.

4

It is best to consult a weather forecast for possible frost conditions because overnight frost can ruin concrete.

5

If you decide to use a concrete pump to place concrete, give the suppliers plenty of warning of your intention.

6

Locate your nearest hire depot for urgent requirements such a water pump in the event of flooding.